## AN UNUSUAL FORM OF SUBCONJUNCTIVAL CYST

By J. W. STIRLING, M.D.

Professor of Ophthalmology, McGill University; Surgeon Oculist, Royal Victoria Hospital, Montreal

THE condition which I report to you to-day is certainly a rare one, and in my search of the literature on the subject, I find no exactly similar case.

The patient, A. R., was an elderly gentleman of seventy-six years of age. He came to me complaining of a swelling on the surface of the left eyeball, which he first noticed five months previously and which was slowly increasing in size. There was no history of any injury to this eye, the only thing being some slight recurrent subconjunctival hæmorrhages six years antecedent.

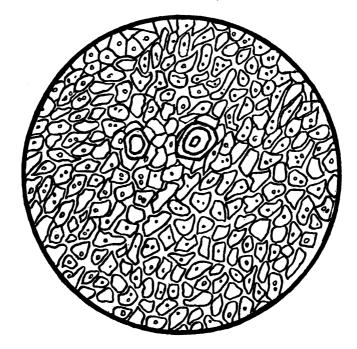
Examination of the eye revealed a large oval semi-opaque swelling starting two millimetres from the outer edge of the cornea, opposite the palpebral fissure and extending outward five millimetres, the vertical diameter being three millimetres in extent. On palpation, it felt resilient with some slight fluctuation. The conjunctiva was adherent to the apex of the swelling but sloped away from it at its base. The growth appeared also to be fixed to the subjacent sclera. There was but very slight conjunctival injection and no tenderness.

On attempting to dissect off the conjunctiva the cyst was perforated near its apex, and clear serous fluid was evacuated, together with seven small opaque bead-shaped bodies varying in size from a small pin head to a split pea. I carefully dissected out the cyst and gave it and its contents to Dr. Oertel, to whom I have to express my thanks for his pathological and microscopical report of the same, which is as follows: The cyst walls consist almost entirely of well formed, large and medium-sized squamous epithelial cells with a good number of epithelial pearls (see drawing). The cells rest in close proximity, forming thick layers, giving the tissue somewhat the appearance of epidermis. From

Read at the forty-eighth annual meeting of the Canadian Medical Association, June 15th, 1917.

these findings it may be concluded that these cysts are of epidermal origin and that they owe their development to proliferation of the lining squamous epithelium, central softening and cystic degeneration, with secondary papillary epithelial projection into the lumen of the mother cyst, this giving rise in similar manner to daughter cysts. The process seems, therefore, comparable in some degree to that of cystitis cystica of the bladder.

The condition is an uncommon one. Cysts, except as traumatic implantation cysts following the imbedding of a foreign body such as an eyelash, epithelium from the conjunctiva or as a lymphangi-



ectasis, cannot occur in the ocular conjunctiva, there being no glands present. Cysts are not uncommon in the palpebral conjunctiva—glands being present.

Uhthoff describes three cases in the Berliner Klinische Wochenschrift for 1879 due to trauma but no secondary small cysts were present. One case followed an advancement of the external rectus—five weeks after the operation; the cyst was adherent to the sclera and partly covered by the advanced rectus tendon in its upper third. Contents were clear serous fluid—cell wall was irregular fibrous formation lined with a single layer of nucleated

squamous epithelium. The second case followed a blow with stick—dividing upper lid edge and conjunctiva bulbi—five weeks after healing, a cyst developed due to implantation of five cilia. The third case was due to an insect flying into the eye; four days later a clear cyst size of a pea developed—dissected out. The structure of the cyst walls in the two foregoing cases was indistinctly fibrous lined with flat epithelium.

Uhthoff at the same time considered the cysts as due to dilated lymphatics.

Cysts of traumatic origin have their situation in the subconjunctival tissue; inflammatory reaction in their neighbourhood binds them down to the sclera and superjacent conjunctiva; hence they cannot be moved on pressure, whereas lymphangiectasis can be moved about with the conjunctiva and are small and bead shaped.

Although my case gave no history of any injury, I am sure it was of traumatic origin following the implantation of some foreign body, although none was found.

A SPECIAL meeting of the St. Thomas Medical Society and the Elgin County Medical Association was held at Inverarie Heights, Port Stanley, on July 26th, Dr. G. Shannon in the chair. A paper on the "Diagnosis and treatment of gall stones and gall bladder troubles," read by Dr. H. A. McCallum, of London, Ontario, was listened to with great interest, as was also a paper entitled "Pneumonia complicating whooping cough," by Dr. G. E. Thompson, of Springfield. Dr. G. A. Brodie, of Woodstock, addressed the meeting on questions of medical interest in connexion with the work of the Ontario Medical Association, and a resolution was passed to the effect that the Elgin County Medical Association become affiliated with the provincial association. About forty doctors were in attendance.